



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,565	05/31/2006	Gianmarco Polotti	LSP-1012US	2000
87627	7590	01/03/2011		
Mossman, Kumar & Tyler PC P.O. Box 421239 Houston, TX 77242				
EXAMINER				
GREENE, IVAN A				
ART UNIT		PAPER NUMBER		
1619				
NOTIFICATION DATE		DELIVERY MODE		
01/03/2011		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docket@mktlaw.us.com  
tthigpen@mktlaw.us.com

# Office Action Summary

## Application No.

10/541,565

## Applicant(s)

POLOTTI ET AL.

## Examiner

IVAN GREENE

## Art Unit

1619

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) 9-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8, 17 and 18 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-940)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### **Status of the Claims**

Claims 1-18 are pending in the instant application. Claims 9-16 have been withdrawn based on Applicant's response to the Requirement for Restriction dated 10/28/2008. Claims 1-8, 17 and 18 are currently being examined on the merits.

### **Advisory Notice**

All rejections and/or objections not explicitly maintained in the instant office action have been withdrawn per Applicants' claim amendments and/or persuasive arguments.

### **New Claim Rejections - Necessitated by Amendment**

#### **Claim Rejections - 35 USC § 103**

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly

Art Unit: 1619

owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

**Claims 1-8, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of KOBAYASHI (EP 750,899) and CHAUDHRY (6,051,245).**

### **Applicants Claims**

Applicant claims an inverse emulsion consisting essentially of the product of mixing an aqueous phase and an oil phase, wherein: (A) the weight ratio of the aqueous phase to the oil phase is from 4:1 to 2:1, (B) the inverse emulsion includes a crosslinker comprising a compound containing two or more ethylenic groups, and (C) the inverse emulsion contains from 20% to 70% by weight of an anionic polymer obtained by inverse emulsion polymerization of: (i) one or more anionic acrylic monomers dissolved in the aqueous phase, and (ii) a least one hydrophobic acrylic monomer dissolved in the oil phase, and wherein (a) the at least one or more anionic acrylic monomers contains a strongly acidic functional group, and (b) the concentration of the at least one hydrophobic acrylic monomer is from 0.1 to 5 weight percent of the total weight of the one or more anionic acrylic monomers.

Applicant further claims the inverse emulsion wherein the anionic acrylic monomer containing a strongly acidic functional group is 2-acrylamido-2-methylpropenesulfonic acid and/or its sodium salt. Applicant further claims the inverse emulsion wherein the hydrophobic acrylic monomer is an ester of acrylic or methacrylic acid with C<sub>4</sub>-C<sub>20</sub> linear or branched monofunctional alcohols. Applicant further claims the inverse emulsion wherein the hydrophobic acrylic monomer is stearyl methacrylate or n-butyl methacrylate. Applicant further claims the crosslinker is methylene-bis-acrylamide and is present in an amount of 0.01% to 1% based on the total weight of the monomers.

**Determination of the scope  
and content of the prior art (MPEP 2141.01)**

Art Unit: 1619

KOBAYASHI teaches an emulsified composition and an emulsified cosmetic with a good stability and usability can be provided by using an emulsifier consisting of a water soluble crosslinked amphiphilic polyelectrolyte obtained by copolymerization of (meth)acrylamido alkylsulfonic acid and N-substituted (meth)acrylamide or (meth)acrylate (abstract). KOBAYASHI teaches the methacrylate monomers present in an amount of more than 1 wt. % are, for example, lauryl methacrylate, stearyl acrylate, stearyl methacrylate (p. 4, lines 32-50).

KOBAYASHI discloses the anionic acrylic polymer containing (i) the anionic acrylic monomers 2-acrylamido-2-methylpropanesulfonic acid, (ii) the hydrophobic acrylic monomer lauryl methacrylate (3.63 wt. %), and (iii) the crosslinker methylene-bis-acrylamide (0.37 wt. %) (p. 7, [Synthesis example 12]).

**Ascertainment of the difference between  
the prior art and the claims (MPEP 2141.02)**

The difference between the rejected claims and the teachings of KOBAYASHI is that KOBAYASHI does not expressly teach an inverse emulsion comprising the polymer species. This deficiency in an inverse emulsion comprising the polymer species is cured by the teachings of CHAUDHRY.

CHAUDHRY teaches thickeners for products for topical application such as personal care products for application to the skin or hair (title, abstract). CHAUDHRY further teaches the polymeric material comprises monomer units derived from (i) acrylamide; (ii) 2-acrylamido-2-methylpropanesulfonic acid (AMPS); and (iii) a polyfunctional monomer (abstract). CHAUDHRY further teaches a significant advantage for the personal care products and pharmaceuticals industry would be to provide a polymer composition which would serve both as a thickener and as a stabilizer and be in liquid form to enable easy handling by automatic dispensers (1:45-50). CHAUDHRY teaches “Surprisingly, we

Art Unit: 1619

have found that it is possible, by the present invention and using the well known inverse polymerization technique, to produce polymers that function as both thickeners and stabilizers" (1:54-57).

CHAUDHRY teaches the water in oil emulsion may be prepared by a method comprising forming a water in oil emulsion of the monomer composition in which the total monomer concentration by weight of the water in oil emulsion is at least 30 weight percent (3:23-38). CHAUDHRY further teaches the polymer solids content of the water-in-oil emulsion incorporated into the personal care product is preferably 35-60% by weight of the total weight of the emulsion (4:35-39). CHAUDHRY further teaches the compositions embodying the invention may be prepared by incorporating the water in oil emulsion into the remaining components, whereupon the emulsion "inverts" to provide a continuous liquid phase comprising the aqueous medium of the emulsion and any liquid in the composition comprising water or miscible with water (4:40-45). CHAUDHRY further discloses the example of an oil in water cream comprising approximately 71 percent by weight water (Example 5; 8:1-18).

Regarding the process steps of claim 1, "Even though product-by process claims are limited by and defined by the process, determination of patentability is based on the product itself. The patentability of a product does not depend on its method of production. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process." See MPEP § 2113.

#### **Finding of prima facie obviousness**

##### **Rationale and Motivation (MPEP 2142-2143)**

It would have been prima facie obvious to one of ordinary skill in the art at the time the claimed invention was made to combine CHAUDHRY with KOBAYASHI because KOBAYASHI teaches similar anionic polymer emulsifier compositions and CHAUDHRY teaches a cosmetic composition comprising a polymer thickener. One skilled in the art would have been motivated to combine CHAUDHRY with KOBAYASHI because it is generally considered to be prima facie obvious to

Art Unit: 1619

combine compositions, each of which is taught by the prior art to be useful for the same purpose, in order to form a composition that is to be used for an identical purpose. The motivation for combining them flows from their having been used individually in the prior art, and from the being recognized in the prior art as useful for the same purpose. As shown by the recited teachings, instant claims are no more than the combination of conventional components of cosmetic polymer thickener compositions. It therefore follows that the instant claims define prima facie obvious subject matter. Cf. In re Kerkhoven, 626 F.2d 848, 205 USPQ 1069 (CCPA 1980).

From the teachings of the references, it is apparent that one of ordinary skill in the art would have had a reasonable expectation of success in producing the claimed invention because KOBAYASHI provides an synthesis example of making the polymer, and making the inverse emulsion would have involved no more than routine laboratory work within the skill of a person having ordinary skill in the art. Therefore, the invention as a whole would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, as evidenced by the references, especially in the absence of evidence to the contrary.

In light of the forgoing discussion, the Examiner concludes that the subject matter defined by the instant claims would have been obvious within the meaning of 35 USC 103(a).

**Response to Arguments:**

Applicant's arguments filed 09/22/2010 have been fully considered but they are moot in view of the new grounds of rejection.

**Conclusion**

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The following non-patent literature documents are cited for applicant's consideration: Kobayashi, Atsushi

Art Unit: 1619

("Solubilization Properties of N-substituted Amphiphilic Acrylamide Copolymers", 1999, Journal of Applied Polymer Science, Vol. 73 pp. 2447-2453).

Claims 1-8, 17 and 18 have been examined on the merits. Claims 1-8, 17 and 18 are rejected under 35 U.S.C. 103(a). No claims are allowed.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to IVAN GREENE whose telephone number is (571)270-5868. The examiner can normally be reached on Monday through Thursday 7AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bonnie Eyler can be reached on (571) 272-0871. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 1619

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

IVAN GREENE  
Examiner, Art Unit 1619

/Cherie M. Woodward/  
Primary Examiner, Art Unit 1647